

Koehler Injection & Balancing



Drag Race Fuel Injection - Flow Testing
 Racing Engine & Industrial **Balancing**
 Cylinder Head Work * Aluminum Welding

Nitrous Master Software & Products

David Koehler

www.koehlerinjection.com

217 469 7663

1888 CR 1600 N. Urbana, IL 61802

Methanol @ 60° = .796sg

Nitro @ 60° = 1.144sg

Nitro percentage versus FUEL temperature = Specific gravity

Copyright 2011, Dave Koehler

Percentage

| Temp | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 40 | 1.107 | 1.110 | 1.114 | 1.117 | 1.121 | 1.124 | 1.128 | 1.131 | 1.135 | 1.138 | 1.142 | 1.145 | 1.149 | 1.153 | 1.156 | 1.160 |
| 41 | 1.106 | 1.109 | 1.113 | 1.116 | 1.120 | 1.124 | 1.127 | 1.131 | 1.134 | 1.138 | 1.141 | 1.145 | 1.148 | 1.152 | 1.155 | 1.159 |
| 42 | 1.105 | 1.109 | 1.112 | 1.116 | 1.119 | 1.123 | 1.126 | 1.130 | 1.133 | 1.137 | 1.140 | 1.144 | 1.147 | 1.151 | 1.155 | 1.158 |
| 43 | 1.104 | 1.108 | 1.111 | 1.115 | 1.118 | 1.122 | 1.126 | 1.129 | 1.133 | 1.136 | 1.140 | 1.143 | 1.147 | 1.150 | 1.154 | 1.157 |
| 44 | 1.104 | 1.107 | 1.111 | 1.114 | 1.118 | 1.121 | 1.125 | 1.128 | 1.132 | 1.135 | 1.139 | 1.142 | 1.146 | 1.149 | 1.153 | 1.156 |
| 45 | 1.103 | 1.106 | 1.110 | 1.113 | 1.117 | 1.121 | 1.124 | 1.128 | 1.131 | 1.135 | 1.138 | 1.142 | 1.145 | 1.149 | 1.152 | 1.156 |
| 46 | 1.102 | 1.106 | 1.109 | 1.113 | 1.116 | 1.120 | 1.123 | 1.127 | 1.130 | 1.134 | 1.137 | 1.141 | 1.144 | 1.148 | 1.151 | 1.155 |
| 47 | 1.101 | 1.105 | 1.109 | 1.112 | 1.116 | 1.119 | 1.123 | 1.126 | 1.130 | 1.133 | 1.137 | 1.140 | 1.144 | 1.147 | 1.151 | 1.154 |
| 48 | 1.101 | 1.104 | 1.108 | 1.111 | 1.115 | 1.118 | 1.122 | 1.125 | 1.129 | 1.132 | 1.136 | 1.139 | 1.143 | 1.146 | 1.150 | 1.153 |
| 49 | 1.100 | 1.104 | 1.107 | 1.111 | 1.114 | 1.118 | 1.121 | 1.125 | 1.128 | 1.132 | 1.135 | 1.139 | 1.142 | 1.146 | 1.149 | 1.153 |
| 50 | 1.099 | 1.103 | 1.106 | 1.110 | 1.113 | 1.117 | 1.120 | 1.124 | 1.127 | 1.131 | 1.134 | 1.138 | 1.141 | 1.145 | 1.148 | 1.152 |
| 51 | 1.099 | 1.102 | 1.106 | 1.109 | 1.113 | 1.116 | 1.120 | 1.123 | 1.127 | 1.130 | 1.134 | 1.137 | 1.141 | 1.144 | 1.148 | 1.151 |
| 52 | 1.098 | 1.101 | 1.105 | 1.108 | 1.112 | 1.115 | 1.119 | 1.122 | 1.126 | 1.129 | 1.133 | 1.136 | 1.140 | 1.143 | 1.147 | 1.150 |
| 53 | 1.097 | 1.101 | 1.104 | 1.108 | 1.111 | 1.115 | 1.118 | 1.122 | 1.125 | 1.129 | 1.132 | 1.136 | 1.139 | 1.143 | 1.146 | 1.150 |
| 54 | 1.096 | 1.100 | 1.103 | 1.107 | 1.110 | 1.114 | 1.117 | 1.121 | 1.124 | 1.128 | 1.131 | 1.135 | 1.138 | 1.142 | 1.145 | 1.149 |
| 55 | 1.096 | 1.099 | 1.103 | 1.106 | 1.110 | 1.113 | 1.117 | 1.120 | 1.124 | 1.127 | 1.131 | 1.134 | 1.138 | 1.141 | 1.145 | 1.148 |
| 56 | 1.095 | 1.099 | 1.102 | 1.106 | 1.109 | 1.113 | 1.116 | 1.119 | 1.123 | 1.126 | 1.130 | 1.133 | 1.137 | 1.140 | 1.144 | 1.147 |
| 57 | 1.094 | 1.098 | 1.101 | 1.105 | 1.108 | 1.112 | 1.115 | 1.119 | 1.122 | 1.126 | 1.129 | 1.133 | 1.136 | 1.140 | 1.143 | 1.147 |
| 58 | 1.094 | 1.097 | 1.101 | 1.104 | 1.108 | 1.111 | 1.115 | 1.118 | 1.122 | 1.125 | 1.129 | 1.132 | 1.136 | 1.139 | 1.142 | 1.146 |
| 59 | 1.093 | 1.096 | 1.100 | 1.103 | 1.107 | 1.110 | 1.114 | 1.117 | 1.121 | 1.124 | 1.128 | 1.131 | 1.135 | 1.138 | 1.142 | 1.145 |
| 60 | 1.092 | 1.096 | 1.099 | 1.103 | 1.106 | 1.110 | 1.113 | 1.117 | 1.120 | 1.124 | 1.127 | 1.131 | 1.134 | 1.138 | 1.141 | 1.144 |

Koehler Injection & Balancing



Drag Race Fuel Injection - Flow Testing
 Racing Engine & Industrial **Balancing**
 Cylinder Head Work * Aluminum Welding

Nitrous Master Software & Products

David Koehler

www.koehlerinjection.com

217 469 7663

1888 CR 1600 N. Urbana, IL 61802

Nitro percentage versus FUEL temperature = Specific gravity

Copyright 2011, Dave Koehler

Percentage

| Temp | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 61 | 1.092 | 1.095 | 1.098 | 1.102 | 1.105 | 1.109 | 1.112 | 1.116 | 1.119 | 1.123 | 1.126 | 1.130 | 1.133 | 1.137 | 1.140 | 1.144 |
| 62 | 1.091 | 1.094 | 1.098 | 1.101 | 1.105 | 1.108 | 1.112 | 1.115 | 1.119 | 1.122 | 1.126 | 1.129 | 1.133 | 1.136 | 1.140 | 1.143 |
| 63 | 1.090 | 1.094 | 1.097 | 1.101 | 1.104 | 1.108 | 1.111 | 1.114 | 1.118 | 1.121 | 1.125 | 1.128 | 1.132 | 1.135 | 1.139 | 1.142 |
| 64 | 1.089 | 1.093 | 1.096 | 1.100 | 1.103 | 1.107 | 1.110 | 1.114 | 1.117 | 1.121 | 1.124 | 1.128 | 1.131 | 1.135 | 1.138 | 1.142 |
| 65 | 1.089 | 1.092 | 1.096 | 1.099 | 1.103 | 1.106 | 1.110 | 1.113 | 1.117 | 1.120 | 1.123 | 1.127 | 1.130 | 1.134 | 1.137 | 1.141 |
| 66 | 1.088 | 1.092 | 1.095 | 1.098 | 1.102 | 1.105 | 1.109 | 1.112 | 1.116 | 1.119 | 1.123 | 1.126 | 1.130 | 1.133 | 1.137 | 1.140 |
| 67 | 1.087 | 1.091 | 1.094 | 1.098 | 1.101 | 1.105 | 1.108 | 1.112 | 1.115 | 1.119 | 1.122 | 1.126 | 1.129 | 1.132 | 1.136 | 1.139 |
| 68 | 1.087 | 1.090 | 1.094 | 1.097 | 1.101 | 1.104 | 1.107 | 1.111 | 1.114 | 1.118 | 1.121 | 1.125 | 1.128 | 1.132 | 1.135 | 1.139 |
| 69 | 1.086 | 1.089 | 1.093 | 1.096 | 1.100 | 1.103 | 1.107 | 1.110 | 1.114 | 1.117 | 1.121 | 1.124 | 1.128 | 1.131 | 1.135 | 1.138 |
| 70 | 1.085 | 1.089 | 1.092 | 1.096 | 1.099 | 1.103 | 1.106 | 1.110 | 1.113 | 1.116 | 1.120 | 1.123 | 1.127 | 1.130 | 1.134 | 1.137 |
| 71 | 1.085 | 1.088 | 1.092 | 1.095 | 1.098 | 1.102 | 1.105 | 1.109 | 1.112 | 1.116 | 1.119 | 1.123 | 1.126 | 1.130 | 1.133 | 1.137 |
| 72 | 1.084 | 1.087 | 1.091 | 1.094 | 1.098 | 1.101 | 1.105 | 1.108 | 1.112 | 1.115 | 1.119 | 1.122 | 1.125 | 1.129 | 1.132 | 1.136 |
| 73 | 1.083 | 1.087 | 1.090 | 1.094 | 1.097 | 1.101 | 1.104 | 1.107 | 1.111 | 1.114 | 1.118 | 1.121 | 1.125 | 1.128 | 1.132 | 1.135 |
| 74 | 1.083 | 1.086 | 1.089 | 1.093 | 1.096 | 1.100 | 1.103 | 1.107 | 1.110 | 1.114 | 1.117 | 1.121 | 1.124 | 1.127 | 1.131 | 1.134 |
| 75 | 1.082 | 1.085 | 1.089 | 1.092 | 1.096 | 1.099 | 1.103 | 1.106 | 1.110 | 1.113 | 1.116 | 1.120 | 1.123 | 1.127 | 1.130 | 1.134 |
| 76 | 1.081 | 1.085 | 1.088 | 1.092 | 1.095 | 1.098 | 1.102 | 1.105 | 1.109 | 1.112 | 1.116 | 1.119 | 1.123 | 1.126 | 1.130 | 1.133 |
| 77 | 1.081 | 1.084 | 1.087 | 1.091 | 1.094 | 1.098 | 1.101 | 1.105 | 1.108 | 1.112 | 1.115 | 1.118 | 1.122 | 1.125 | 1.129 | 1.132 |
| 78 | 1.080 | 1.083 | 1.087 | 1.090 | 1.094 | 1.097 | 1.101 | 1.104 | 1.107 | 1.111 | 1.114 | 1.118 | 1.121 | 1.125 | 1.128 | 1.132 |
| 79 | 1.079 | 1.083 | 1.086 | 1.090 | 1.093 | 1.096 | 1.100 | 1.103 | 1.107 | 1.110 | 1.114 | 1.117 | 1.121 | 1.124 | 1.127 | 1.131 |
| 80 | 1.079 | 1.082 | 1.085 | 1.089 | 1.092 | 1.096 | 1.099 | 1.103 | 1.106 | 1.110 | 1.113 | 1.116 | 1.120 | 1.123 | 1.127 | 1.130 |
| 81 | 1.078 | 1.081 | 1.085 | 1.088 | 1.092 | 1.095 | 1.099 | 1.102 | 1.105 | 1.109 | 1.112 | 1.116 | 1.119 | 1.123 | 1.126 | 1.129 |

Koehler Injection & Balancing



Drag Race Fuel Injection - Flow Testing

Racing Engine & Industrial **Balancing**

Cylinder Head Work * Aluminum Welding

Nitrous Master Software & Products

David Koehler

www.koehlerinjection.com

217 469 7663

1888 CR 1600 N. Urbana, IL 61802

Nitro percentage versus FUEL temperature = Specific gravity

Copyright 2011, Dave Koehler

Percentage

| Temp | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 82 | 1.077 | 1.081 | 1.084 | 1.088 | 1.091 | 1.094 | 1.098 | 1.101 | 1.105 | 1.108 | 1.112 | 1.115 | 1.118 | 1.122 | 1.125 | 1.129 |
| 83 | 1.077 | 1.080 | 1.083 | 1.087 | 1.090 | 1.094 | 1.097 | 1.101 | 1.104 | 1.107 | 1.111 | 1.114 | 1.118 | 1.121 | 1.125 | 1.128 |
| 84 | 1.076 | 1.079 | 1.083 | 1.086 | 1.090 | 1.093 | 1.097 | 1.100 | 1.103 | 1.107 | 1.110 | 1.114 | 1.117 | 1.121 | 1.124 | 1.127 |
| 85 | 1.075 | 1.079 | 1.082 | 1.086 | 1.089 | 1.092 | 1.096 | 1.099 | 1.103 | 1.106 | 1.110 | 1.113 | 1.116 | 1.120 | 1.123 | 1.127 |
| 86 | 1.075 | 1.078 | 1.081 | 1.085 | 1.088 | 1.092 | 1.095 | 1.099 | 1.102 | 1.105 | 1.109 | 1.112 | 1.116 | 1.119 | 1.123 | 1.126 |
| 87 | 1.074 | 1.077 | 1.081 | 1.084 | 1.088 | 1.091 | 1.094 | 1.098 | 1.101 | 1.105 | 1.108 | 1.112 | 1.115 | 1.118 | 1.122 | 1.125 |
| 88 | 1.073 | 1.077 | 1.080 | 1.084 | 1.087 | 1.090 | 1.094 | 1.097 | 1.101 | 1.104 | 1.108 | 1.111 | 1.114 | 1.118 | 1.121 | 1.125 |
| 89 | 1.073 | 1.076 | 1.079 | 1.083 | 1.086 | 1.090 | 1.093 | 1.097 | 1.100 | 1.103 | 1.107 | 1.110 | 1.114 | 1.117 | 1.121 | 1.124 |
| 90 | 1.072 | 1.075 | 1.079 | 1.082 | 1.086 | 1.089 | 1.093 | 1.096 | 1.099 | 1.103 | 1.106 | 1.110 | 1.113 | 1.116 | 1.120 | 1.123 |
| 91 | 1.071 | 1.075 | 1.078 | 1.082 | 1.085 | 1.088 | 1.092 | 1.095 | 1.099 | 1.102 | 1.106 | 1.109 | 1.112 | 1.116 | 1.119 | 1.123 |
| 92 | 1.071 | 1.074 | 1.078 | 1.081 | 1.084 | 1.088 | 1.091 | 1.095 | 1.098 | 1.101 | 1.105 | 1.108 | 1.112 | 1.115 | 1.119 | 1.122 |
| 93 | 1.070 | 1.073 | 1.077 | 1.080 | 1.084 | 1.087 | 1.091 | 1.094 | 1.097 | 1.101 | 1.104 | 1.108 | 1.111 | 1.114 | 1.118 | 1.121 |
| 94 | 1.069 | 1.073 | 1.076 | 1.080 | 1.083 | 1.086 | 1.090 | 1.093 | 1.097 | 1.100 | 1.104 | 1.107 | 1.110 | 1.114 | 1.117 | 1.121 |
| 95 | 1.069 | 1.072 | 1.076 | 1.079 | 1.082 | 1.086 | 1.089 | 1.093 | 1.096 | 1.099 | 1.103 | 1.106 | 1.110 | 1.113 | 1.116 | 1.120 |
| 96 | 1.068 | 1.072 | 1.075 | 1.078 | 1.082 | 1.085 | 1.089 | 1.092 | 1.095 | 1.099 | 1.102 | 1.106 | 1.109 | 1.112 | 1.116 | 1.119 |
| 97 | 1.067 | 1.071 | 1.074 | 1.078 | 1.081 | 1.084 | 1.088 | 1.091 | 1.095 | 1.098 | 1.102 | 1.105 | 1.108 | 1.112 | 1.115 | 1.119 |
| 98 | 1.067 | 1.070 | 1.074 | 1.077 | 1.080 | 1.084 | 1.087 | 1.091 | 1.094 | 1.097 | 1.101 | 1.104 | 1.108 | 1.111 | 1.114 | 1.118 |
| 99 | 1.066 | 1.070 | 1.073 | 1.076 | 1.080 | 1.083 | 1.087 | 1.090 | 1.093 | 1.097 | 1.100 | 1.104 | 1.107 | 1.110 | 1.114 | 1.117 |
| 100 | 1.066 | 1.069 | 1.072 | 1.076 | 1.079 | 1.083 | 1.086 | 1.089 | 1.093 | 1.096 | 1.100 | 1.103 | 1.106 | 1.110 | 1.113 | 1.117 |